

TITLE

ISOLATION AND EXPRESSION OF A GENE FOR A NITRILASE
FROM *ACIDOVORAX FACILIS* 72W

ABSTRACT

5 Recombinant microbial strains are provided that express nitrilase enzyme
and are useful as biocatalysts for the hydrolysis of nitrile-containing substrates.
The recombinant cells are transformed with a foreign gene isolated from
Acidovorax facilis 72W encoding a thermostable nitrilase enzyme that catalyzes
the hydrolysis of nitrile-containing substrates to carboxylic acids under mild
10 reaction conditions. The nucleotide sequence of the nitrilase gene and the
deduced amino acid sequence encoded by the nitrilase gene are provided.

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